~~CLAIMS~~ WHAT IS CLAIMED IS:

1. (Currently Amended) An equipment fan, comprising ~~having an external~~ a housing (12) radially surrounding a fan wheel (22; 122), said housing having an ~~whose~~ inner side (17) which defines ~~is penetrated by~~

an air conveying conduit (16) in which said fan wheel is arranged, said ~~a~~ fan wheel (22; 122) ~~that is~~ being rotatable about a central axis (25) and ~~comprises~~ including a central hub (20; 120) having an outer periphery (27; 127) on which are mounted fan blades (26; 126) whose radially outer rims (40; 140) are each at a distance (d) from the adjacent inner side (17) of the fan housing (12),

~~which~~ wherein each of said blades (26; 126) ~~each have a profile that is implemented similarly to the~~ is shaped like an airfoil profile of an aircraft,

the blades each being implemented in concave and sickle-shaped fashion on their front edge (128), in such a way that ~~the~~ a radially outer end (130) of a sickle (128) is located, with reference to ~~the~~ a rotation direction (124) of said fan wheel, farther forward in ~~the~~ a circumferential direction than ~~the~~ a hub-side end (132) of the sickle (128),

and the blades are furthermore ~~implemented in~~ each twisted between said hub-side end and said radially outer end ~~fashion~~ and have a convex rear edge (136), and along the twisted radial outer edge (40; 140) of each fan blade (26; 126) and adjacently to the inner side (17) of the external housing (12),

a flow element (42; 142) is provided which has an outline analogous to that of the associated fan blade (26; 126) and which is implemented as a flow-pattern obstacle for a compensating flow proceeding around that twisted radial outer edge (40; 140) from the delivery side to the intake side, in order to reduce ~~the~~ noise generated during operation by the equipment fan (10).

2. (Currently Amended) The fan according to claim 1, ~~which comprises an~~ wherein said external housing (12) ~~away from which extends~~ is formed with at least one strut (18) ~~proceeding~~ extending transversely to the air conveying conduit (16),

and the rear edge (36; 136) of the blades (26; 126) is implemented convexly, in such a way that, upon rotation of the fan wheel (22; 122), each rear edge (36; 136), viewed in plan, intersects that strut (18) at different locations at successive points in time.

3. (Original) The fan according to claim 2,

wherein the convex rear edge (36; 136) is implemented with grazing intersections.

4. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims,~~

wherein the concavely sickle-shaped front edge (128) has a region (132) that lags the most, with reference to the rotational motion (124), which region is located substantially at the transition from the hub (120) to the front edge (128) of the relevant blade (126).

5. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims,~~

wherein the concavely sickle-shaped front edge (128) encloses, with the region of the hub (120) located in front of the relevant blade (126), an angle (alpha) that is equal to approximately 90° or less.

6. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~, wherein

the blade (126) is twisted in such a way that ~~its~~ it has a thread pitch which is greater at the hub (120) than ~~in the region of the~~ near radially outer edges (140) of the blade.

7. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~,

wherein the fan blades (126) each have, viewed in a sagittal section, a profile that corresponds approximately to an airfoil profile.

8. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~,

wherein the respective flow elements (142) extend at least locally on both ~~sides, i.e. on the~~ a delivery side of the fan and an intake side of the fan, along ~~the~~ respective radially outer rims (140) of the fan blades (126).

9. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~,

wherein the flow elements (142) each have a profile that, ~~in the region of the~~ adjacent a front edge (128) of a fan blade (126), increases from that front edge (128) in the manner of the front edge of an airfoil,

and tapers ~~in the region of the~~ adjacent a rear edge (136) in the manner of the rear edge of an airfoil.

10. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~,

wherein the fan blades (26; 126), viewed in a radial section, are ~~implemented~~ shaped convexly toward the intake side,

and transition at least over a part of their extension, in their radially outer region, with a radius of curvature, into a portion of the associated flow element (42; 142) projecting toward the intake side.

11. (Currently Amended) The fan according to claim 1, ~~any of the preceding claims~~,

wherein the fan blades (26; 126), viewed in a radial section, are ~~implemented~~ shaped concavely toward ~~the~~ an air delivery side of the fan, and transition at least over a part of their extension, with their radially outer rim, with a radius of curvature, into a portion of the associated flow element (42; 142) projecting toward the delivery side.

12. (Currently Amended) A fan ~~having~~ comprising:

an air conveying conduit (16) and a fan wheel (22; 122) arranged therein, which wheel is rotatable about a central axis (25) and ~~comprises~~ is formed with a central hub (20; 120) having an outer periphery (27; 127) on which are mounted fan blades (26; 126) that extend with their radially outer rims (40; 140) as far as a surface (17) that is substantially coaxial with the central axis (25) and delimits the air conveying conduit (16) externally,

which blades (26; 126) each have a profile that is ~~implemented similarly to~~ shaped like the airfoil profile of an aircraft,

there being provided, along the radial outer edge (40; 140) of the fan blades (26; 126), a respective flow element (42; 142) that is implemented as a flow-pattern obstacle for a compensating flow proceeding around that radial outer edge (40; 140) from the delivery side to the intake side,

which flow element (42; 142) is likewise ~~implemented in cross section~~ cross-sectionally shaped substantially like an airfoil profile, and has, ~~in the region of the~~ adjacent its front edge (28; 128) and the rear edge (36; 136) of a blade (26; 126) substantially the same outline as the adjacent part of the associated blade (26; 126),

and in a middle region (48) between the front and back edge is wider, by an approximately constant amount, than the adjacent part of the blade (26; 126).

13. (Currently Amended) The fan according to claim 12, wherein

in a transition region between the front edge (28; 128) and middle region (48), ~~the~~ a ratio of the axial extension of the flow element (42; 142) to the axial extension (D) of the adjacent blade (26) increases in the direction away from the front edge (28; 128).

14. (Currently Amended) The fan according to claim 12 ~~or 13~~, wherein

in a transition region between the rear edge (36; 136) and middle region (48), ~~the~~ a ratio of the axial extension of the flow element (42; 142) to the axial extension (D) of the adjacent blade (26; 126) increases in the direction away from the rear edge (36; 136).

15. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 14~~,

wherein the flow elements (42; 142) extend, at least locally, on both sides, i.e. on the delivery and intake sides, along the radially outer rim of the fan blades (26; 126).

16. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 15,~~ wherein ~~the flow elements (42, 142) are implemented to be at least locally higher on the delivery side, viewed in the axial direction, than on the intake side~~

each of said blades (26; 126) has a front edge (128) which is concave and sickle-shaped, so that, defining forward with respect to a rotation direction of the fan,

a radially outer end (130) of a sickle projects further forward than does a hub-adjacent end (132) of the sickle (128).

17. (Currently Amended) The fan according to claim 12 ~~any of claims 12 to 16,~~

wherein the blades (26; 126) are each twisted in such a way that their pitch at the hub (20; 120) is greater than the pitch in the region of the radially outer edge (40; 140).

18. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 17,~~

wherein the blades (26; 126) are implemented in the region of the rear edge convexly and with grazing intersections.

19. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 18~~, which comprises an external housing (12) from which there extends away at least one strut (18) proceeding transversely to the air conveying conduit (16),

and the rear edge (36; 136) of the blades (26; 126) is implemented convexly in such a way that upon rotation of the fan wheel (22; 122), that rear edge (36; 136), viewed in plan, intersects that strut (18) at different locations at successive points in time.

20. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 19~~,

wherein the fan blades (26; 126), viewed in a radial section, are implemented convexly toward the intake side, and transition at least over a portion of their extension, in their radially outer region, with a radius of curvature, into a portion of the associated flow element (42; 142) projecting toward the intake side.

21. (Currently Amended) The fan according to claim 12, ~~any of claims 12 to 20~~,

wherein the fan blades (26; 126), viewed in a radial section, are ~~implemented~~ curved concavely toward ~~the~~ a delivery side of the fan, and transition at least over a portion of their extension, with their radially outer rim, with a radius of curvature, into a portion of the associated flow element (42; 142) projecting toward the delivery side of the fan.

22. (Currently Amended) The fan according to claim 12, ~~any of the preceding claims~~, which is implemented as a diagonal fan,

and wherein the flow elements (42; 142) are provided only on the intake side of the blades (26; 126).